



Virginia Department of Environmental Quality
Division of Land Protection and Revitalization
Office of Financial Responsibility and Waste Programs
1111 E. Main St., Suite 1400, P. O. Box 1105, Richmond, VA 23218

FACT SHEET
**DRAFT CLOSURE PLAN FOR CLOSURE OF UNIT FOR THE
OPEN BURNING (OB) OF
HAZARDOUS WASTE**

August 18, 2021

Facility Name Naval Surface Warfare Center, Dahlgren Division

EPA Facility ID Number VA7170024684

Owner/Operator United States Navy

Address of Facility 17320 Dahlgren Road
Dahlgren, Virginia 22448

Purpose of Fact Sheet

This fact sheet is prepared in accordance with the requirements of the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60-124, as incorporated by reference under 40 CFR § 124.8. This fact sheet provides information on the current status of the facility, the facility background, the facility's current hazardous waste management activities, and the public comment period associated with the Draft Closure Plan for the Wood Fired Burn Box (Burn Box Closure Plan).

Facility Type and Current Facility Status

The Naval Surface Warfare Center, Dahlgren Division (NSWCDD) is an operating hazardous waste management facility. NSWCDD is owned and operated by the United States Navy. The facility encompasses 4,320 acres in northern Virginia. It is located approximately 55 miles south of Washington, D.C. and 23 miles east of Fredericksburg between the Potomac and Rappahannock Rivers. NSWCDD is wholly contained in King George County, Virginia. The facility is adjacent to the Potomac River and the Upper Machodoc Creek, a tidal tributary of the Potomac, which divides NSWCDD into two (2) portions commonly known as Pumpkin Neck and Mainside. The Open Burning (OB) grounds are located at the Churchill Range within the Pumpkin Neck portion of the facility.

The Wood Fired Burn Box (Burn Box) is being closed as the unit was removed from the most recent permit renewal as a permitted treatment unit, which makes the former operating unit now subject to closure. Since the permitted open burning area at the NSWCDD facility is still active

this closure is only focused on the Burn Box unit itself and not the soil or groundwater at the unit location. Closure will be performed under Resource Conservation and Recovery Act (RCRA) code of Federal Regulations (CFR) 40 CFR Part 264, Subparts G and X as incorporated in the Virginia Regulations - 9 Virginia Administrative Code 20-60-264A. The VDEQ is overseeing the closure.

The Burn Box would be closed in accordance with the Burn Box Closure Plan, dated July 2021 that is the subject of this Fact Sheet and 40 CFR § 264.

Waste Types

NSWCDD is one of the Navy's principal research, development, testing, and evaluation (RDT&E) centers. During the RDT&E process, NSWCDD generates excess ordnance and other energetic materials. These items either have no further military use or have been stressed to a point where they are no longer safe for transport. NSWCDD also accepts unserviceable, obsolete, and/or waste military munitions from other Department of Defense (DOD) facilities for treatment. Because these materials exhibit the characteristic of reactivity, they must be managed as hazardous waste.

The Burn Box treated primers, fuzes, small arms ammunition, waste explosive, and high explosives. For treatment events, consumable scrap material such as wood excelsior was placed in the bottom of the unit to form a firebed (approximately 3-ft. deep). The explosive items (maximum 40 pounds net explosive weight) burned were laid out on the consumable material. Diesel fuel and smokeless powder were added to the unit and then ignited using an electrical squib firing system. Components of military propellants were in solid form and contained no free liquids.

Unit Description

Thermal treatment of hazardous waste is performed by open burning and open detonation. The OB grounds consist of a 300' x 300' graveled area. The wood-fired burn box is constructed of 1-inch thick steel and sits on a ½-inch thick steel base. The box is square in shape, and is approximately 6-feet (ft.) wide, 6-ft. deep, and 4.5-ft. high. The burn box is equipped with both an interior and exterior cover. The interior steel cover has multiple holes to allow venting and fragment containment simultaneously. The exterior ¼-inch thick aluminum cover is placed over the box as soon as cooling allows and remains in place until the box is cleaned out or preparing for another burn.

Closure Plan – Type of Closure

The NSWCDD facility will be pursuing a clean closure of the Burn Box for potential reuse of the Burn Box for non-hazardous waste activities at the facility, recycling, or disposal as a solid

waste.

This closure plan describes how closure will be accomplished, by decontamination of the Burn Box using brushes and a series of pressure washings to remove any hazardous constituents. The rinsate from the pressure washings will be collected in the steel containment pan the Burn Box will be placed into. Rinsate samples will be tested to determine the concentration of the identified Constituents of Potential Concern COPCs and the analytical results will be compared to EPA's Maximum Concentration Limit (MCLs), Risk Based Concentrations (RBCs) or analytical non-detect. If the analysis of the rinsate sampling does not show acceptable levels of the COPCs the decontamination procedure will be repeated and an additional rinsate sampling analysis will be performed. If the levels of COPCs in the rinsate water are still not at an acceptable level and NSWCDD. is unable to attain clean closure for the Burn Box, then an amended Closure Plan will be submitted to the DEQ for approval.

A Certification of Closure will be submitted to the DEQ within 60 days of completion of closure. This certification, stating that the Burn Box has been closed in accordance with the requirements of the approved Closure Plan, will be made by both the NSWCDD facility and an independent Professional Engineer registered in the state of Virginia. Until the Certification of Closure has been approved by the DEQ, NSWCDD will maintain an onsite copy of the approved Closure Plan and all approved Closure Plan revisions.

Closure activities include: The DEQ approval of the closure plan, mobilization, decontamination of the Burn Box, rinsate sample collection, laboratory verification analyses and data validation, DEQ site inspection, and closure certification.

Closure of the Burn Box will be in such a manner that it:

- Minimizes the need for further maintenance;
- Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, hazardous constituents, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or the atmosphere; and
- Complies with the closure requirements of 40 CFR Part 264.

Public Comment Period

Begins: August 18, 2021
Ends: September 17, 2021

Consistent with the requirements under 40 CFR § 265.112(d)(4), the public is given thirty (30) days to review and comment on the Draft Closure Plan. All persons, including the

Owner/Operator, who believe the tentative decision to approve this Closure Plan is inappropriate must raise all ascertainable issues and submit all available arguments and factual grounds supporting their position by September 17, 2021. Copies of such comments should be sent to:

Virginia Department of Environmental Quality
Office of Financial Responsibility and Waste Programs
ATTN: Ashby Scott, RCRA Permit Writer
P.O. Box 1105
Richmond, Virginia 23218
Phone No. (804) 698-4467
Fax No. (804) 698-4178
E-mail ashby.scott@deq.virginia.gov

The DEQ will also accept comments from the public by e-mail. All comments received must include the full name, mailing address, and phone number of the person generating the comments.

Public Information

The public may review the Draft Closure Plan, fact sheet and public notice at the following locations:

DEQ Northern Virginia Regional Office
Contact: Richard Doucette
13901 Crown Court
Woodbridge, Virginia 22193
Phone: (703) 583-3813
* Every work day by appointment

DEQ Office of Financial Responsibility and Waste Programs
Contact: Ashby Scott
1111 East Main Street, Suite 1400,
Richmond, VA 23219
Phone: (804) 698-4467
* Every work day by appointment

Procedures for Reaching a Final Decision:

When making the final determination to approve the Closure Plan for the facility, the DEQ will consider all written comments received during the comment period. Each person that has submitted comments in accordance with this public notice period will receive a written response

from the DEQ. Thereafter, the final Closure Plan shall become effective immediately upon approval.

Closure Plan Organization and Conditions

<u>Section</u>	<u>Topic</u>
Section 1	Introduction
Section 2	Facility Description
Section 3	Closure Performance Standards
Section 4	Closure of the Wood Fired Burn Box
Section 5	Waste Management from Closure Activities
Section 6	Closure Process
Section 7	Schedule for Closure and Certification
Section 8	Contingent Closure Plan
Section 9	Closure Cost Estimate
Section 10	Financial Assurance Mechanism